



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/590,769	06/08/2000	Robert M. Lukas	034300-105	9907

7590 06/02/2003

ROBERT E. KREBS
THELEN REID & PRIEST LLP
P.O. BOX 640640
SAN JOSE, CA 95164-0640

EXAMINER

SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
----------	--------------

2182

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/590,769

Applicant(s)

LUKAS, ROBERT M. 10

Examiner

Joshua D Schneider

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 17-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 17-27 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claims do not include the limitation of emulating the operations of an "always connected" type connection over a "connection establishment" type network.

2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 17-27 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

3. Applicant's arguments, see pages 5-8 of Amendment A, filed 3/20/2003, with respect to the rejection(s) of claim(s) 1 and 10 under 35 U.S.C 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 4,853,954 to Richards. The new rejection makes clear that there is unambiguous means for "connection establishment" type network emulating an "always connected" type network. It is also noted that the assertion by the applicant that the WAN is an "always connected" type network is not necessarily the case. The simplest model of a WAN is the connection of a remote workstation to a network element over a modem link (Hirviniemi, column 1, lines 49-64), and so the WAN may simply be a remote workstation using a "connection establishment" type network to access a LAN.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi in further view of U.S. Patent 4,853,954 to Richards. With regards to claim 1, Hirviniemi teaches the emulation of an "always connected" type protocol that may be over a "connection establishment" type network (column 1, lines 49-64). Hirviniemi teaches that upon initiation of a TCP/IP application request to start communication, the MAC manager provides a response so that the application believes it has received the correct reply. The application then starts sending data packets, and the MAC manager prepares the packets to be sent out through the modem link. Hirviniemi fails to explicitly teach that the emulation means is that of an "always connected" type. Richards teaches means for emulation of an "always connected" type I/O device driver even though the communications are transmitted over a "connection establishment" type network (see abstract and column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the modem of Richards with the protocol of Hirviniemi in order to create a system which provides a transparent network connection in order to allow user applications to continue processing without waiting for a connection to be established.

6. With regards to claim 2, the Hirviniemi reference teaches that "always connected" type network services are emulated to the computer application (column 2, lines 8-34).

Art Unit: 2182

7. With regards to claim 3, Hirviniemi teaches that the MAC manager intercepts the application ARP requests and generates responses so that the TCP/IP application begins sending data (column 2, lines 8-34).
8. With regards to claim 4, Hirviniemi teaches the network services are ARP services (column 2, lines 8-18).
9. With regards to claim 6, Hirviniemi teaches that ARP messages transmitted by the TCP/IP application software are intercepted, a response is sent back to the application with a physical address, and that upon receiving this response, the application perceives an "always connected" network connection and begins to transfer data packets (column 2, lines 8-34).
10. With regards to claim 8, Hirviniemi discloses the use of LAN communications and TCP/IP software as the LAN I/O driver (column 1, lines 12-20).
11. With regards to claim 9, Hirviniemi discloses the use of LAN internet type communications and TCP/IP software as the LAN internet I/O driver (column 1, lines 12-20).
12. Claims 10-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi and U.S. Patent 4,853,954 to Richards in further view of the applicant admitted prior art (AAPA). With regards to claim 10, Hirviniemi teaches the emulation of an "always connected" type protocol that may be over a "connection establishment" type network (column 1, lines 49-64). Hirviniemi teaches that upon initiation of a TCP/IP application request to start communication, the MAC manager provides a response so that the application believes it has received the correct reply. The application then starts sending data packets, and the MAC manager prepares the packets to be sent out through the modem link. Hirviniemi fails to explicitly teach that the emulation means is that of an "always connected"

Art Unit: 2182

type. Richards teaches means for emulation of an "always connected" type I/O device driver even though the communications are transmitted over a "connection establishment" type network (see abstract and column 2, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the modem of Richards with the protocol of Hirviniemi in order to create a system which provides a transparent network connection in order to allow user applications to continue processing without waiting for a connection to be established. Hirviniemi fails to teach the use of a wireless modem. The AAPA teaches that a wireless modem is conventional in a computer (page 1, lines 10-14). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the AAPA taught wireless modem with the emulation system of Hirviniemi and Richards, to create a wire free computer system that is competitive in the modern computer market.

13. With regards to claim 11, the Hirviniemi reference teaches that "always connected" type network services are emulated to the computer application (column 2, lines 8-34).

14. With regards to claim 12, Hirviniemi teaches that the MAC manager intercepts the application ARP requests and generates responses so that the TCP/IP application begins sending data (column 2, lines 8-34).

15. With regards to claim 13, Hirviniemi teaches the network services are ARP services (column 2, lines 8-18).

16. With regards to claim 15, Hirviniemi teaches that ARP messages transmitted by the TCP/IP application software are intercepted, a response is sent back to the application with a physical address, and that upon receiving this response, the application perceives an "always connected" network connection and begins to transfer data packets (column 2, lines 8-34).

Art Unit: 2182

17. Claims 5, 7, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,802,285 to Hirviniemi and U.S. Patent 4,853,954 to Richards as applied to claims 1-4, 6, 8-13, and 15 above, and further in view of U.S. Patent 6,028,848 to Bhatia et al. With regards to claims 5 and 14, Hirviniemi fails to teach the use of DHCP type network services. Bhatia et al. teaches that DHCP network services in combination with the translating of addresses are well known (column 4, line 52, through column 6, line 49). It would have been obvious to one of ordinary skill in the art at the time of invention, to combine the network protocol emulation of Hirviniemi with the well-known DHCP services of Bhatia et al. in order to increase compatibility in a competitive computer market.

18. With regards to claims 7 and 16, Hirviniemi teaches the use of ARP and a MAC manager to emulate an "always connected" type connection to the application software, including sending messages back to the application, so that the application begins data transmission as if it were connected to an "always connected" type system (column 1, lines 51-59, and column 2, lines 8-34). Hirviniemi does not teach the same type of response system for DHCP services. The Bhatia et al. reference teaches that both DHCP and ARP services are known in address protocol emulation systems (column 4, line 52, through column 6, line 49). Bhatia et al. teaches that DHCP services are integrated with the routing and management processes and operate transparently to the computers, including message responses and maintaining an identifier stack. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the emulation system of Hirviniemi and the DHCP services of Bhatia et al. in order to create a system which interacts within a DHCP network environment, in order increase compatibility in a competitive computer market.

Art Unit: 2182

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Schneider whose telephone number is (703) 305-7991. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (703) 308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JDS
May 27, 2003



KIM HUYNH
PRIMARY EXAMINER